

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,423	11/19/2003	Masaki Yoshinari	107156-00210	4213
7590 11/15/2005			EXAMINER	
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC			SANTIAGO, MARICELI	
Suite 600 1050 Connecticut Avenue Washington, DC 20036-5339			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/715,423	YOSHINARI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Mariceli Santiago	2879				
The MAILING DATE of this communication appo Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	-· action is non-final.					
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
· _						
4) Claim(s) 1-10 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-10</u> is/are rejected. 7)□ Claim(s) is/are objected to.						
are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>19 November 2003</u> is/are: a)⊠ accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
a)⊠ All b)□ Some * c)□ None of:	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
,— ,— ,— ,—	have been received					
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
obstance detailed office action for a list of the certified copies flot received.						
Attachment(s) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal Pa	atent Application (PTO-152)				
Paper No(s)/Mail Date 11/03; 9/05. 6) Other:						

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kani (US 5,493,175).

Regarding claim 7, Kani discloses a display-panel-use partition wall (12) made of metal and placed between two first (1) and second (13) substrates, arranged opposite each other with a hermetically sealed space between, to partition the hermetically sealed space into unit light emission areas, the display-panel-use partition wall comprising first through holes formed in a matrix arrangement in a portion of a metal plate opposite a display area portion of the first substrate for formation of the unit light emission areas, second through holes (8) formed in a portion of the metal plate opposite non-display area portion of the first substrate (Fig. 1), and an insulating layer covering an outer surface the display-panel-use partition wall (Column 4, lines 12-16).

The recitation "to function in a burning process" is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed element is intended to be employed does not differentiate the claimed element from a prior art structure satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987).

Regarding claim 8, Kani discloses a display-panel-use partition wall wherein the second through holes are formed at regular intervals in the portion of the metal plate opposite the non-display area portion of the first substrate (Fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kani (US 5,493,175) in view of Van Esdonk et al (US 3,776,613).

Regarding claim 1, Kani discloses a display panel comprising first and second substrates (1, 13) placed opposite each other to form a hermetically sealed space between them, a glass frit material layer (9) formed on the first substrate, a metal plate (12) covered with an insulating layer (Column 4, lines 12-16), and fixed onto an inner surface of the first substrate by the glass frit material, and having a plurality of first through holes formed in a matrix arrangement in a portion of the metal plate opposite a display area portion of the first substrate for formation of unit light emission areas, and second through holes (8) formed in a portion of the metal plate opposite a non-display area portion of the first substrate. Kani discloses the use of a glass frit material instead of a resin layer. However, in the same field of endeavor, Esdonk discloses a display panel comprising a first and second substrates placed opposite each other to form a hermetically sealed space between them, a material layer (12), made of either glass or resin, formed on the first substrate, and a metal plate fixed onto an inner surface of the first substrate by the material layer. It has been held to be within the general skill of a worker in the

art to select a known equivalent material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to use a resin layer instead of glass, since the selection of known equivalents materials for a known purpose is within the skill of the art as evidenced by Esdonk's teachings.

The recitation "to function in a burning process" is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed element is intended to be employed does not differentiate the claimed element from a prior art structure satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987).

Regarding claim 2, Kani discloses a display panel wherein the second through holes are formed at regular intervals in the portion of the metal plate opposite the non-display area portion of the first substrate (Fig. 1).

Regarding claim 5, Kani discloses a method of manufacturing a display panel, comprising the steps of forming a glass frit material (9) on an inner surface of a first substrate of first and second substrates (1 and 13) which are placed opposite each other form a hermetically sealed space between the two substrates, arranging, a metal plate (12) covered with an insulating layer (Column 4, lines 12-16) and having a plurality of first through holes formed matrix arrangement in a portion opposite a display area portion of the first substrate formation of unit light emission areas, and second through holes (8) formed in a portion opposite a non-display area portion of the first substrate, and heating the first substrate, having the metal plate arranged thereon, the metal plate onto the first substrate by the glass frit material. Kani discloses the use of a glass frit layer instead of a resin layer. Kani discloses the use of a glass frit material instead of a resin layer. However, in the same field of endeavor, Esdonk discloses a

display panel comprising a first and second substrates placed opposite each other to form a hermetically sealed space between them, a material layer (12), made of either glass or resin, formed on the first substrate, and a metal plate fixed onto an inner surface of the first substrate by the material layer. It has been held to be within the general skill of a worker in the art to select a known equivalent material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to use a resin layer instead of glass, since the selection of known equivalents materials for a known purpose is within the skill of the art as evidenced by Esdonk's teachings.

The recitation "to function in a burning process" is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed element is intended to be employed does not differentiate the claimed element from a prior art structure satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987).

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kani (US 5,493,175) in view of Caras (US 3,683,222).

Regarding claims 9 and 10, Kani fails to disclose the limitation of plural registration through holes formed in the portion of the metal plate opposite the non-display area portion of the first substrate. However, in the same field of endeavor, Caras discloses a metal plate further comprising plural registration through holes formed in the portion of the metal plate opposite the non-display area portion of the first substrate, to provide proper aligning technique between the display elements. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the registration through hole disclosed by

Caras in the metal plate of Kani in order to provide proper aligning technique between the display elements.

Page 6

Claims 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kani (US 5,493,175) in view of Van Esdonk et al (US 3,776,613), and further in view of Murouchi et al. (US 6,036,568).

Regarding claims 3 and 4, Kani fails to disclose the limitation of a registration mark indicated in a selected position on the inner surface of the first substrate, and a registration through hole formed in a portion of the metal plate opposite the registration mark indicated on the first substrate. However, in the same field of endeavor, Murouchi discloses a method of assembling flat panel substrates wherein a registration through hole is formed in a portion of a first substrate and a registration mark is indicated in a selected position on the inner surface of a second substrate, opposite the registration through hole formed on the first substrate, in order to obtain proper alignment of the substrate members by means of optical alignment techniques. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the registration through holes and registration marks disclosed by Muroichi in the display of Kani-Van Esdonk in order to obtain proper alignment of the substrate members by means of optical alignment techniques.

Furthermore, in regards to claim 4, Murouchi discloses a plurality of the registration marks respectively indicated in a plurality of positions of the second substrate, and the registration through holes are formed in the first substrate in a number corresponding to the number of registration marks indicated on the second substrate.

Regarding claim 6, Kani fails to disclose the limitation wherein in the step of arranging the metal plate on the resin layer formed on the first substrate, a position of a registration

through hole formed in the metal plate and a position of a registration mark formed in a selected position on the inner surface of the first substrate are aligned with each other for registration of the metal plate with respect to the first substrate. However, in the same field of endeavor, Murouchi discloses a method of assembling flat panel substrates wherein a registration through hole is formed in a portion of a first substrate and a registration mark is indicated in a selected position on the inner surface of a second substrate, opposite the registration through hole formed on the first substrate, in order to obtain proper alignment of the substrate members by means of optical alignment techniques. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the registration through holes and registration marks disclosed by Muroichi in the display of Kani-Van Esdonk in order to obtain proper alignment of the substrate members by means of optical alignment techniques.

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Application/Control Number: 10/715,423 Page 8

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mariceli Santiago
Primary Examiner
Art Unit 2879